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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,969	03/25/2004	Gregory Steckman	OND-009	7894

60110 7590 10/31/2008
ONDAX, INC.
850 EAST DUARTE ROAD
MONROVIA, CA 91016

EXAMINER	
ANGEBRANNDT, MARTIN J	

ART UNIT	PAPER NUMBER
1795	

MAIL DATE	DELIVERY MODE
10/31/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/809,969	STECKMAN ET AL.	
	Examiner	**Art Unit**	
	Martin J. Angebranndt	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _28 August 2008_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-73_ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-73_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

1. The response of the applicant has been read and given careful consideration. Responses to the arguments of the applicant are presented after the first rejection to which they are directed.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 38,42,45,46,48,49,61,62 and 66-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), in view of Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Lemaire et al. '341.

Lemaire et al. '341 teach an optical Bragg grating which is temperature compensated by the provision of a device 10, which is cylindrical and has the same length as the grating. The materials used are chosen on the basis of their coefficient of thermal expansion (CTE). The inner expansion member may have a low CTE such as SS, INVAR or a ceramic, while the outer expansion member may have a higher CTE, such as aluminum. The primary embodiment decreases the pre-strain (tension) on the grating as the temperature increases. In an alternative embodiment, the pre-strain (tension) is increased with increasing temperature. (4/24-63). The tubes are held to be spacers with the end caps being plates and attaching means.

Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000) teach the formation of a photosensitive Ge doped

silica with a diameter of 4.5 mm and a length of 4 mm. (page 1766, left column). This is slice into disks and gratings recorded in this. (page 1766, left column).

Borelli et al. '262 teaches the use of bulk Ge doped silica to form refractive index patterns. The recording of a Bragg grating in a bulk phase glass with dimensions of 5 x 5 x 3 mm is disclosed (13/45-58).

Hill, "simple transient holograms in ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) teaches the recording of a Bragg grating in a ruby (Cr doped aluminum oxide) rod 3.17 cm long with a diamoter of 0.965 cm using a two beam interference process. (page 1696, left column)

It would have been obvious to modify medium of Borelli et al. '262 by using a cylindrical shape, such as that taught by Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), rather than a rectangular/cubic shape with a reasonable expecation of being able to record a grating without interference fromthe outer shape based upon the teachings of Hill, "simple transient holograms in ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and to use the methods taught for stabilizing the resulting Bragg gratings against wavelength fluctuation due to thermal expansion as taught by Lemaire et al. '341 with a reasonable expectation of success based upon the prior use of this technique to stabilized Bragg Gratings with a similar shape, but differing in size. The examiner points to In re Rose, 220 F2d 459, 105 USPQ 237 (CCPA 1955) where it was held that the difference in the size did not matter as the process could be merely scaled up. The examiner points out that the rods rendered obvious by Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), Borelli et

al. '262 and Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) contain Bragg gratings and are merely larger than the optical fibers of Lemaire et al. '341, which would require the stabilization means to be similarly larger, but the effect of the stabilization on Bragg gratings is known in the prior art and the size of the recording medium does not affect how that process works.

IV. CHANGES IN SIZE, SHAPE, OR SEQUENCE OF ADDING INGREDIENTS

A. *Changes in Size/Proportion*

In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955) (Claims directed to a lumber package "of appreciable size and weight requiring handling by a lift truck" where held unpatentable over prior art lumber packages which could be lifted by hand because limitations relating to the size of the package were not sufficient to patentably distinguish over the prior art.); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being scaled up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F.2d at 1053, 189 USPQ at 148.).

In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

The claims now exclude waveguiding articles and the rejections now include references describing bulk phase/monolith with Bragg gratings recorded therein. The issue now appaears to be one of the obviousness of scaling the techniques disclosed by Lemaire et al. '341 and other

references discussing optical fibers to the larger photosensitive glass articles. Clearly, there is a desire to reduce the wavelength shift of the grating due to thermal fluctuations for all gratings and the position of the examiner is that the claims are claiming processes known in the art which are merely scaled up to having the larger size/ volume of the larger photosensitive glasses of bulk glass articles from the smaller optical fibers. As the spectral reflection/transmission of a gratins is a function of the grating period, all gratings are inherently spectral filters.

4. Claims 1-5,8-12,19,22-33,38-42,45-49,56 and 59-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), in view of Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Sullivan et al. '957.

Sullivan et al. '957 teach with respect to figure 1, an athermal optical fiber device which has Bragg (volume reflection) gratings formed therein. The formation of aperiodic (chirped) gratings or periodic gratings is disclosed. The use of the reflection gratings in the reflection mode or transmission mode is disclosed (5/20-43). The element taught with respect to figure 1 includes elements with 3 mm diameter, although other diameters can be used to provide strain the optical fiber. The element sleeve (10) and the end cap (28) are made of a low CTE materials such as quartz, glass, silica or a ceramic and the spacer (26) is made of a higher CTE material such as Al. The materials and their length are chosen on the based of the desired CTE for the resulting structure. The curves in figure 2 shows a change of 0.145 pm/degree C. The spacer may be a composite of materials to provide the desired CTE response (7/4-8/33). The use of pre-

strain is also disclosed (8/34-57). The reference does not describe the grating in figure 1 as uniform or chirped, but the examiner holds that one skilled in the art would immediately envision either as there are only two choices presented. Further, there appear to be multiple spacers in the element. The use of doped fibers is disclosed. (5/20-35).

It would have been obvious to modify medium of Borelli et al. '262 by using a cylindrical shape, such as that taught by Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), rather than a rectangular/cubic shape with a reasonable expecation of being able to record a grating without interference fromthe outer shape based upon the teachings of Hill, "simple transient holograms in ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and to use the methods taught for stabilizing the resulting Bragg gratings against wavelength fluctuation due to thermal expansion as taught by Sullivan et al. '957 with a reasonable expectation of success based upon the prior use of this technique to stabilized Bragg Gratings with a similar shape, but differing in size. The examiner points to In re Rose, 220 F2d 459, 105 USPQ 237 (CCPA 1955) where it was held that the difference in the size did not matter as the process could be merely scaled up. The examiner points out that the rods rendered obvious by Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), Borelli et al. '262 and Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) contain Bragg gratings and are merely larger than the optical fibers of Sullivan et al. '957, which would require the stabilization means to be similarly larger, but the effect of the stabilization on Bragg gratings is known in the prior art and the size of the recording medium does not affect how that process works.

5. Claims 1-12,19,22-49,56 and 59-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), in view of Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Sullivan et al. '957, further in view of Glenn et al. '950, Glenn et al. 173 or Laming et al. '829.

Glenn et al. '950 teaches exposing using two beams to recording gratings in optical fibers and is referenced for this in Sullivan et al. '957 at column 5. The use of germaia doped fibers is disclosed. (1/61-62).

Glenn et al. 173 teaches exposing using two beams to recording aperiodic gratings in optical fibers and is referenced for this in Sullivan et al. '957 at column 5. The use of germaia doped fibers is disclosed. (1/10-21).

Laming et al. '829 teach using two beam methods or phase masks for recording gratings in optical fibers (1/1/19-2/6).

To address those embodiments bounded by the claims, but not rendered obvious or anticipated above, the examiner holds that it would have been obvious to one skilled in the art to modify the process of forming athermal gratings rendered obvious by the combination of Borelli et al. '262, Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Sullivan et al. '957 by using phase masking or a two beam exposure process as is known in the art from either of Glenn et al. '950, Glenn et

al. 173 or Laming et al. '829 with a reasonable expectation of forming the desired grating based upon the direction to these gratings in column 5 of Sullivan et al. '957.

The applicant argues on page 16 of the response that the shapes are different, but the claims do not recite the shape and the specification in figures 1-3 illustrate cylindrical filters [0037] which is the shape of an optical fiber. The applicants have not chosen to exclude cylindrical shapes and so the argued position is incongruent with the disclosed invention and not coextensive with the claimed invention.

6. Claims 1-12,19-49 and 56-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), in view of Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Sullivan et al. '957 combined with either Glenn et al. '950, Glenn et al. 173 or Laming et al. '829 and further in view of Fells et al. '187.

Fells et al. '187 teaches the thermal compensation means shown in figure 6, where load spreading washers spacers 62 are used to conpensate for any non-uniformities and may be made of (soft) copper. (10/42-47). The use of glass solder (52) as a bonding means is disclosed. (9/26-67).

To address those embodiments bounded by the claims, but not rendered obvious or anticipated above, the examiner holds that it would have been obvious to one skilled in the art to modify the processes rendered obvious above by the combination of Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Sullivan et al. '957 with either Glenn et al. '950, Glenn et al. 173 or Laming et al. '829, by adding copper load spreading spacers or glass solder between spacers to either bond them together or compensate for non-uniformities in the mating surfaces as taught by Fells et al. '187 with a reasonable expectation of success based upon the use of this material for the same purpose.

7. Claims 38,39,42 and 45-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), in view of Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Myers et al., '863.

Myers et al., '863 teaches the formation of a fiber based grating by wrapping super Invar materials around the fiber at the either at a high temperature or at a low temperature [0003]. The figure 1 does not seem to be uniform in pitch. The changes in temperature cause the wrapping to squeeze the fiber to prevent radial expansion.

It would have been obvious to modify medium of Borelli et al. '262 by using a cylindrical shape, such as that taught by Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), rather than a rectangular/cubic shape with a reasonable expecation of being able to record a grating without interference fromthe outer shape based upon the teachings of Hill, "simple transient holograms in ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and to use the methods taught for stabilizing the resulting Bragg gratings against wavelength fluctuation due to thermal expansion as taught by Myers et al., '863 with a reasonable expectation of success based upon the prior use of this technique to stabilized Bragg Gratings with a similar shape, but differing in size. The examiner points to In re Rose, 220 F2d 459, 105 USPQ 237 (CCPA 1955) where it was held that the difference in the size did not matter as the process could be merely scaled up. The examiner points out that the rods rendered obvious by Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), Borelli et al. '262 and Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) contain Bragg gratings and are merely larger than the optical fibers of Myers et al., '863 which would require the stabilization means to be similarly larger, but the effect of the stabilization on Bragg gratings is known in the prior art and the size of the recording medium does not affect how that process works.

To address those embodiments bounded by the claims, but not rendered obvious or anticipated above, the examiner holds that as the effect is achieved in Myers et al. '863 by the mechanical constriction of the fiber by the wound wire, it is clear than the thickness and composition are not critical, provided they are appropriate to wrapping (thin enough to be

flexible) and strong enough (sufficient thickness and materials strength) to resist the expansion of the fiber. On this basis, the examiner holds that it would have been obvious to one skilled in the art to use any fiber having the correct CTE to offset the radial expansion of the fiber and that the use wire/fibers with thicknesses having nominal thickness variation and/or of compositional variation would have been obvious to one skilled in the art.

8. Claims 1-18 and 38-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), in view of Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Myers et al., '863, further in view of Sullivan et al. '957 combined with Glenn et al. '950, Glenn et al. 173 or Laming et al. '829.

To address those embodiments bounded by the claims, but not rendered obvious or anticipated above, the examiner holds that it would have been obvious to one skilled in the art to modify the process of forming the athermal grating of rendered obvious by the combination of Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Myers et al., '863 by using phase masking or a two beam exposure process as is known in the art from either of Glenn et al. '950, Glenn et al. 173 or Laming et al. '829 with a reasonable expectation of forming the desired grating based upon the direction to these gratings in column 5 of Sullivan et al. '957 and

further to use this thermal correction for either chirped or continuous gratings based upon the direction within Sullivan et al. '957.

The examiner relies upon the response above as no further arguments were directed at this rejection

9. Claims 1-5,8-12,19,22-33,38-42,45-49,56 and 59-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), in view of Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Sullivan et al. '957, in view of Paek et al. '220.

Paek et al. '220 teach optical fiber gratings are categorized into reflection (Bragg) gratings, which are short period gratings and transmission gratings, which have a longer period (1/35-47).

To address embodiments, which may not be anticipated above, the examiner cites, Paek et al. '220, which supports the position asserted above, that the gratings are similar in orientation, but differ in how they are used and their period and holds that it would have been obvious to one skilled in the art to modify the processes rendered obvious by the combination of Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Sullivan et al. '957 by using transmission

grating filters such as those taught by Paek et al. '220 in place of the reflection filters with a reasonable expectation of being able to provide temperature compensation.

10. 1-12,19,22-49,56 and 59-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), in view of Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Sullivan et al. '957, in view of Glenn et al. '950, Glenn et al. 173 or Laming et al. '829, further in view of Paek et al. '220.

To address embodiments, which may not be anticipated above, the examiner cites, Paek et al. '220, which supports the position asserted above, that the gratings are similar in orientation, but differ in how they are used and their period and holds that it would have been obvious to one skilled in the art to modify the processes rendered obvious by the combination of Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Sullivan et al. '957 combined with Glenn et al. '950, Glenn et al. 173 or Laming et al. '829 by using transmission grating filters such as those taught by Paek et al. '220 in place of the reflection filters with a reasonable expectation of being able to provide temperature compensation.

11. Claims 1-12,19-49 and 56-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), in view of Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Sullivan et al. '957 combined with either (Glenn et al. '950, Glenn et al. 173 or Laming et al. '829) and Fells et al. '187, further in view of Paek et al. '220.

To address embodiments, which may not be anticipated above, the examiner cites, Paek et al. '220, which supports the position asserted above, that the gratings are similar in orientation, but differ in how they are used and their period and holds that it would have been obvious to one skilled in the art to modify the process of Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971) and Sullivan et al. '957 combined with either (Glenn et al. '950, Glenn et al. 173 or Laming et al. '829) and Fells et al. '187 by using transmission grating filters such as those taught by Paek et al. '220 in place of the reflection filters with a reasonable expectation of being able to provide temperature compensation.

12. Claims 1-18 and 38-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borelli et al. '262 and Heaney et al., 'sol-gel derived photosensitive genrmanosilicate glass monoliths', Opt. Lett., Vol. 25(24) pp. 1765-1767 (102/2000), in view of Hill. "Simple Transient Holograms in Ruby", Appl.Opt., Vol. 10(7) pp. 1695-1697 (07/1971), Myers et al., '863 and Sullivan et al. '957 combined with Glenn et al. '950, Glenn et al. 173 or Laming et al. '829, further in view of Paek et al. '220.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J. Angebranndt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Martin J Angebranndt/
Primary Examiner, Art Unit 1795

Martin J Angebranndt
Primary Examiner

Art Unit 1756

10/27/2008